

Investigation of Electron Distribution in  
a Batatron Vacuum Chamber

77325  
SOV/57-30-1-4/18

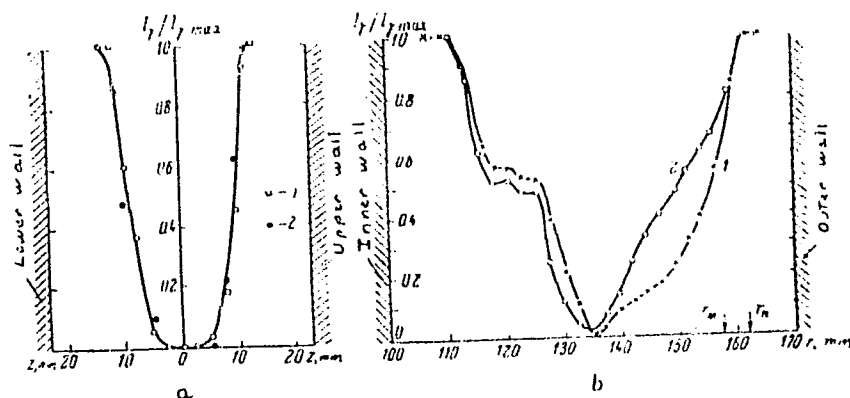


Fig. 4. (a): (1) energy of accelerated electrons, 5 mev; (2) energy of accelerated electrons, 15 mev; (b): (1) electron throw-off on external target: energy of accelerated electrons, 5 mev; (2) electron throw-off on inner wall of the chamber; energy of accelerated electrons, 5 mev.

Card 7/9

Investigation of Electron Distribution in  
a Batatron Vacuum Chamber

77325  
SOV/57-30-1-4/18

for the effective value of  $n$ . The difference in shape of curves 1 and 2, Fig. 4b, is due only to the fact that when the back side of the injector is used as the target, the  $\gamma$ -rays from the probe (which is also a target for electrons, see Fig. 3) miss the ionization chamber. There are 4 figures; and 3 Soviet references.

ASSOCIATION: Physico-Technical Institute AS USSR, Leningrad C. (Fiziko-tekhnicheskiy institut AN SSSR, g. Leningrad)

SUBMITTED: July 20, 1959 .

Card 8/9

Investigation of Electron Distribution in  
a Batatron Vacuum Chamber

77325  
SCV/57-30-1-4/18

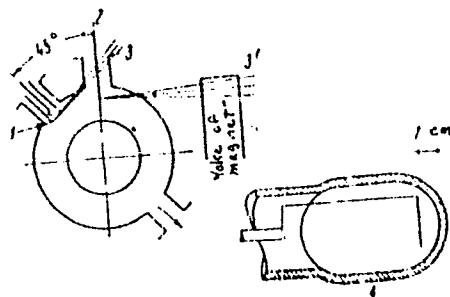


Fig. 3. (1) injector with  
the target mounted on its  
back side; (2) probe;  
(3 and 3') - beams of  
 $\gamma$ -rays generated at  
the target and in the  
probe; (4) diagram of  
probe position in the  
chamber.

Card 9/9

DEKISOV, P.I. (Frunse)

On F.T.Dziub's article "On a serious defect in the secondary school  
program. Mat. v shkolo no.4:85-86 J1-Ag '56. (MLRA 9:9)  
(Mathematics--Study and teaching)

DENISOV, P.I.

DENISOV, P.I. (Frunze).

Overloading students with academic material. Mat. v shkole no.1:  
23-24 Ja-F '58. (MIRA 11:1)  
(Mathematics--Study and teaching)

DENISOV, P.I., inzh., red.; SHTAREV, Ya.K., inzh., red.

[Construction specifications and regulations] Stroitel'nye normy i pravila. Moskva, Gosstroizdat. Pt.2. Sec.I. ch.3. [Installations for reclamation systems; specifications for designs] Sooruzheniia meliorativnykh sistem; normy proektirovaniia (SNiP II-I. 3-62). 1963. 40 p. (MIRA 17:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosstroy SSSR (for Denisov). 3. Gosudarstvennyy institut po proyektirovaniyu vodokhozyaystvennogo i meliorativnogo stroitel'stva (for Shtarev).

ISUPOV, G.F.; SUD'YA, V.P.; DENISOV, P.I.

Mechanizing slab removal from holding furnaces. Metallurg  
7 no.6:32-33 Je '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgi-  
cheskikh zavodov.

(Furnaces, Heating—Maintenance and repair)  
(Materials handling)

| PROCESSING AND PROPERTY INDEX                             |   |   |   |   |   |   |   |   |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| COMMON ELEMENTS                                           |   |   |   |   |   |   |   |   |    |    |    |    | COMMON ELEMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |    |    |    |    |    |    |    |    |
| 1                                                         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| <p>ca</p>                                                 |   |   |   |   |   |   |   |   |    |    |    |    | <p>Influence of cobalt, chromium and manganese on iron-nickel-aluminum magnetic alloys. A. S. Zaimovskii and P. L. Denisov. <i>Kuchevskaya Stal</i> 4, No. 10, 311-313 (1937); <i>Met. Abstracts (in Metals &amp; Alloys)</i> 8, 2005 (1937); cf. C. A. 31, 2568. Addition of Co, Cr and Mn to Fe-Ni-Al alloys do not increase their saturation magnetization, but they do increase their coercivity. It is possible only by lowering Ni and, particularly, Al content. Co pronouncedly stabilizes a soft, and increases coercive force, when it replaces a part of Ni or Al. An alloy, developed during the investigation, contains Ni 20-22, Al 10-12 and Co 5-10% and has residual induction of 7000-8000 gauss and coercivity of 400-500 oersteds. Study of magnetization curves indicates that in high-coercivity alloys the influence of natural anisotropy is small, major influence being attributed to internal stresses. M. W. B.</p> |    |    |    |    |    |    |    |    |    |    |    |    |
| <p>ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION</p> |   |   |   |   |   |   |   |   |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    |    |    |    |    |    |    |    |    |    |
| <p>140000 26</p>                                          |   |   |   |   |   |   |   |   |    |    |    |    | <p>140000 26</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |    |    |    |    |



| PROCESSES AND PROPERTIES INDEX                         |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| MATERIALS INDEX                                        |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |
| MATERIALS INDEX                                        |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |
| <p><i>CR</i></p> <p>DENISOV, P.</p>                    |  |  |  |  |  |  |  |  |  |  |  |  | <p>Improving iron-nickel-aluminum magnetic alloys. A. Zaimovskii and P. Denisov. <i>Novosti Tekhniki</i> 1936. No. 37-38, 10.—Addn. of Co to the Fe-Ni-Al magnetic alloys retarded the decompn. of alloys and increased their coercive force. An iron alloy contg. Ni 20-22, Al 9-12 and Co 5-7% has a residual induction of 7000 gauss and a coercive force of 400-500 oersteds. The magnetic energy of this alloy is 30-40% higher than that of the Fe-Ni-Al alloys. A. A. Podernov</p> |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | PROCESSING AND PROPERTIES INDEX                                                                                                                                                                                                                                                                            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>The Effect of Copper, Molybdenum, Tungsten, Titanium and Vanadium on the Magnetic Properties of Iron-Nickel-Aluminium Alloys.</b> A. Zaymovskiy, P. Denisov and N. Volkenshteyn. (Stal, 1938, No. 5, pp. 60-64). (In Russian). Maximum remanence and coercive force in permanent magnets of 5-10 sq. cm. cross-section containing 28% of nickel and 11% of aluminium can be obtained by quenching in oil at 1250-1280° C. and tempering at 650° C. In 1935-36 the Russian Electrical Research Institute developed an alloy containing 20-33% of nickel, 9-12% of aluminium and 5-2% of cobalt, which when made with cross-sections of from 5 to 20 sq. cm. had much better magnetic properties than the iron-nickel-aluminium alloys. Its heat treatment was also extremely simple, consisting of cooling in air from 1200° C. In the present article the results of a research on the effect of other alloying constituents are summarised. Copper was added mainly as a substitute for nickel, whilst the object of the other alloy additions was either to reduce the rate of decomposition of the <math>\alpha</math> solid solution or to increase the coercive force or magnetic energy content. The results, given in the form of curves, show that, whereas copper lowers the magnetic properties when used as a substitute for nickel, it has a beneficial effect upon 25/15, 28/13 and 30/11 nickel-aluminium alloys, and confers on them satisfactory properties in the as-cast condition. Vanadium and titanium improve the behaviour of the</p> |  |                                                                                                                                                                                                                                                                                                            |  |
| <p>ASB 564 METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                            |  |
| <p>FROM 270-62177</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <p>FROM 270-62177</p>                                                                                                                                                                                                                                                                                      |  |
| <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p> |  |

steel during quenching and tempering, and raise the coercive force, at the same time lowering the remanence. Molybdenum is very deleterious, whilst tungsten is less so. The beneficial effect of alloying additions on the coercive force of iron-nickel-aluminium alloys decreases in the order cobalt, titanium, vanadium, copper.

A: & S.

Geology

Nonfreezing clay solutions. P. I. Denisov. *Ass. buldizhnikov Neflyanov Akos*, 1949, No. 1, pp. 31-32; *Khim. Referat. Zhur.*, 4 [9] 110 (1941). -- The preparation of nonfreezing clay solutions in water with the addition of salts greatly enhances the stability of the solution. In the laboratory investigating the preparation of nonfreezing clay solutions, the waters from Kara-Chukture wells were also tested. The nonfreezing suspensions were prepared with well water, sea water, and their mixtures. To make a clay suspension nonfreezing at 10°, D. recommends well and sea water in the ratio of 50:50 or 25:75. M. Ho.

**CA**

**APPARATUS FOR DETERMINING THE RATE OF FILTRATION OF CLAY SUSPENSIONS.** P. I. Denisov. *Azobaldzhanskie Nauchnoye Khim. Zh.*, No. 11, 23(1947).—The app. comprises a manual air pump and a metal funnel closed with a cover. The funnel cover carries a pressure gage and an inlet connected by a rubber tube to the pump. M. Hosh.

**480-568 METALLURGICAL LITERATURE (CLASSIFICATION)**

**18000 SYNOPTIC**

**18000 MAY DIV**

**RELATIONS**

**18000 NOMINAT**

**RELATION ONE ONLY 181**

The Specific Gravity of Weighting (Cont.)

SOV/93-58-10-6/19

that the Gosplan of the USSR reexamine the specifications for weighting materials used in drilling fluids. There are 2 tables, 1 figure, and 3 references, 2 of which are Soviet and 1 English.

Card 2/2

SOV/99-59-1-2/13

AUTHORS: Denisov, P.I., Engineer and Shubladze, K.K., Candidate of Agricultural Sciences

TITLE: For a Utilization of Reserves in Irrigated Farming Districts (Za ispol'zovaniye rezervov v oroshayemom zemledelii)

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 1, pp 7-19 (USSR)

ABSTRACT: In the light of the tasks which await Soviet agriculture in the 1959-1965 plan, it is of utmost importance to fully utilize all the irrigated areas and considerably increase their productivity. One of the most important problems is to improve irrigation methods. The authors state that, from 1945 to 1957, irrigable areas have increased by 2,483,000 hectares, but the acreage actually under irrigation increased by only 1,405,000 hectares. In 1957, 3,870,000 hectares of meliorated areas were not irrigated. The main cause was the short-

Card 1/3

SOV/99-59-1-2/13

For a Utilization of Reserves in Irrigated Farming Districts

age of water, poor organization and shortage of labor, bad soil conditions, (swampy, salty). Only 493,000 hectares of the three million plus did not require irrigation. The authors state that the present, manual method of irrigation causes huge losses of water in filtration, evaporation and so on. They estimate that up to 25,000,000,000 cubic m of water (costing about 1,000,000,000 rubles) are lost every year. They recommend a general introduction of the sprinkling method, already widely used abroad. In the US, about 1,000,000 hectares are irrigated this way and only 48,000 hectares in the USSR. This method has many advantages over the old method: a higher labor efficiency, better quality of irrigation, etc. The authors enumerate different sprinkling machines in use abroad and in the USSR. Different examples of improved harvesting methods and their cost are presented in tables 2-5. The authors cite different

Card 2/3



SOV/99-59-1-2/13

For a Utilization of Reserves in Irrigated Farming Districts

measures to be undertaken to improve the operating efficiency of the Soviet irrigation systems. There are 5 tables, 6 photographs and 1 diagram.

Card 3/3

DENISOV, P. I.

All-Union seminar for exchange of experience with workers of the  
"Al'met'evburneft'" Trust. Bñul.tekh.-ekon.inform. no.11:66 '60.  
(MIRA 13:11)

(Al'met'evsk--Oil well drilling)

DENISOV, P.I.

Session of the permanent committee of the State Scientific  
Technological Board on Drilling of the R.S.F.S.R. Biul.tekh.-  
ekon. inform. no.3:69 '61. (MIRA 14:3)  
(Oil well drilling)

DENISOV, P.I.

Visiting session of the permanent committee on boring of the  
State Scientific Technological Board of the R.S.F.S.R.  
Biul.tekh.-ekon.inform. no.6:72-73 '61. (MIRA 14:6)  
(Oil well drilling)

DENISOV, P.I.; ABDYLDAYEV, T., otv. red.; SEMENOV, I.S., otv. red.

[V.I.Lenin and certain mathematical problems] V.I.Lenin i  
nekotorye voprosy matematiki. Frunze, Kirgizskii gos.univ.,  
1962. 25 p. (MIRA 15:7)  
(Mathematics—Philosophy)

DENISOV, P.I.; ZHERNEYEV, M.G.; KARAYEV, A.K.; KAYESHKOVA, S.M., ved.  
red.; VOROB'YEVA, L.V., tekhn. red.

[Drilling in gas and gas-condensate fields] Burenie skvazhin na  
gazovykh i gazokondensatnykh mestorozhdeniyakh; materialy vy-  
ezdnoi sessii postoiannoï Komissii po bureniiu. Moskva, Gos-  
toptekhnizdat, 1962. 159 p. (MIRA 16:2)

1. Russia (1917- R.S.F.S.R.) Komissiya po bureniiu. 2. Krasno-  
darskiy sovmarkhoz (for Karayev).

(Krasnodar Territory--Condensate oil wells)

(Krasnodar Territory--Gas wells)

DENISOV, P.I., red.; ZHERDEV, M.G., red.; ZHERDEV, M.G., red.;  
ISAYEVA, V.V., ved. red.; VORONOVA, V.V., tekhn. red.

[Technical methods and equipment for drilling deep wells]  
Tekhnika i tekhnologiya bureniya glubokikh skvazhin; materialy respublikanskogo soveshchaniia v g.Kuibysheve. Moskva, Gostoptekhnizdat, 1962. 278 p. (MIRA 15:12)  
(Boring)

DENISOV, P.I.

Introduction of high-efficiency surface-active agents in the  
petroleum industry. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.  
nauch.i tekhn.inform. no.5:82 '62. (MIRA 15:7)  
(Surface-active agents) (Petroleum industry)



SMIRNOV, N.N., inzh., red. SHAPIRO, L.L., kand. tekhn. nauk, red.;  
DENISOV, P.I., red.; KAGAN, G.S., inzh., red.; IFINKA,  
 G.A., red. izd-va; MOCHALINA, Z.S., tekhn. red.

[Construction specifications and regulations] Stroitel'nye  
 normy i pravila. Moskva, Gosstroizdat. Pt.3. Sec.I.  
 ch.3.[Construction of land improvement systems; regula-  
 tions for construction and acceptance of work] Sooruzhenia  
 meliorativnykh sistem; pravila organizatsii stroitel'stva ,  
 proizvodstva rabot i priemki v ekspluatatsiiu  
 (SNiP III-I. 3-62). 1963. 18 p. (MIRA 16:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po de-  
 lam stroitel'stva. 2. Gosudarstvennyy komitet po delam  
 stroitel'stva SSSR (for Smirnov). 3. Mezhdovedomstvennaya  
 komissiya po peresmotru stroitel'nykh norm i pravil Aka-  
 demii stroitel'stva i arkhitektury SSSR (for Shapiro).  
 4. Upravleniye proyektirovaniya, izyskaniy i issledovaniy  
 dlya stroitel'stva gidrotekhnicheskikh sooruzheniy (for  
 Denisov). 5. Gosudarstvennyy institut po proyektirovaniyu  
 vodokhozyaystvennogo i meliorativnogo stroitel'stva  
 Ministerstva sel'skogo khozyaystva SSSR (for Kagan).  
 (Reclamation of land)

DENISOV, P.I.

Electric drilling of oil and gas wells. Biul.tekh.-ekon.inform.  
Gos.nauch.-issl.inst.nauch. i tekhn.inform. 16 no.11:11-14 '63.  
(MIRA 16:11)

DENISOV, Petr. Ivanovich; ZHVANETSKIY, Yefim Fedorovich; DUBROVINA,  
N.D., ved. red.; POLOSINA, A.S., tekhn. red.

[Preparing and using dry mud in drilling] Proizvodstvo i  
primeneniye glinoporoshkov v burenii. Moskva, Izd-vo  
"Nedra," 1964. 109 p. (MIRA 17:3)

DENISOV, P.I.

Using clay powders in drilling oil and gas wells. Biul. tekhn.-  
ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. 17  
no.2:10-11 '64. (MIRA 17:6)

DENISOV, P.I.

Introducing the method of drilling wells without lifting the  
drilling string. Riut. tekhn. inform. Ser. mash.-inst.  
inst. mash. i tekhn. inform. 17 no.6:16-19 1961.

(MIA 12:11)

DENISOV, P.I.

Generalization of the use of natural flushing solutions. Bul.  
tekhn.-ekon. inform. Gos. nauch.-issl. nauch. i tekhn. inform.  
17 no.9:81 3 '64 (MIRA 18:1)

DENISOV, P.I.

Introduction of surface-active substances into the petroleum  
production industry of the R.S.F.S.R. Biul. tekhn.-ekon. inform.  
Gos. nauch.-issl. inst. nauch. i tekhn. inform. 18 no.2:6-7  
F '65. (MIRA 18:5)

DENISOV, P.I.

Future development of the drilling of oil and gas wells in the  
R.S.F.S.R. Biul.tekh.ekon.inform.Gos.nauch.-issl.inst.nauch.i  
tekh.inform. 17 no.10:10-12 0 '64. (MIRA 18:4)



DENISOV, P. K.

Graficheskii metod kontrolya vagonnogo parka. [The graphic method of control of rolling stock]. Moskva, Gos. transp. zhel-dor. izd-vo, 1946. 43 p. diagrs.

DLC: TF377.D4

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress  
Reference Department Washington: 1959. Unclassified

DENISOV, P. K.

Nagruzhi elektricheskikh zheleznikh dorog [Loads for electric railroads]. Moskva, Akademizdat, 1952.

SO: Monthly List of Russian Accessions, Vol. 6, No. 5, August 1953

DENISOV, P. K., and ROZANOV, I. Z.

Great communist construction projects and the problem of selecting the future system of current for the electrification of the principal railroad lines, Izv. Ak SSSR Otd. tekhn. nauk., No 3, 1952/

DENISOV, P. K.

With M. Z. Romanov author of the article "Choice of the Most Promising Current System for Electrification of Main-Line Railroads in the USSR", Elektrichestvo, No 11, 1952, p88.

SO: W 25904, 28 April 1953, [REDACTED]

*DENISOV, P.K.*

112-3-5942

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,  
Nr 3, pp. 126-127 (USSR)

AUTHOR: Minov, D.K., Denisov, P.K.

TITLE: Technical and Economic Prerequisites for a New Electrification System of Railroads in the USSR (Tekhniko-ekonomicheskiye predposylki novoy sistemy elektrifikatsii zheleznikh dorog v SSSR)

PERIODICAL: In the sbornik: Novyye vidy tyagi na transporte, Moskva, AN SSSR, 1956, pp. 8-19

ABSTRACT: The characteristic features of electrical traction systems employing 3-kv direct current and single-phase standard-frequency current are presented. Even with conversion of all 3-kv substations to automatic and remote control operation and with a greater density of substations, the cross section of the contact wire is not reduced sufficiently if powerful electric locomotives are used. An increase in d-c voltage in the contact wire to 15-20 kv and transformation to three-phase or

Card 1/3

112-3-5942

Technical and Economic Prerequisites for a New Electrification  
System of Railroads in the USSR

direct low-voltage current in the locomotives for feeding the traction motors requires complex devices. With the application of a-c, the value of the voltage in the contact network may be admitted within the limits of 22 to 27 kv, and for newly-built railroads - up to 35 kv, and this in accordance with specifications for the clearance of approach of the current-carrying portions to existing permanent structures. The results of comparing the two systems on the basis of capital expenditures and operating expenses are presented; the cost of electrical equipment for the single-phase system is less than that of the 3-kv direct-current system and the difference increases with greater power ratings of electric locomotives. Table 1 lists the capital expenditures in % in terms of freight traffic of  $20 \times 10^6$  and  $40 \times 10^6$  kilometer-tons per kilometer for a double track line.

Card 2/3

112-3-5942

Technical and Economic Prerequisites for a New Electrification  
System of Railroads in the USSR

Capital expenditures for the direct-current system with freight traffic of  $20 \times 10^6$  kilometer-tons per kilometer are taken as 100%. This table also gives electrical power consumption for both systems in the case of a double-track line. An equal number of electric locomotives was assumed in the calculations, although single-phase locomotives possess greater coupling coefficients and average speeds than d-c locomotives, with the result that fewer electric locomotives of the first type are required than of the second type of equal capacity. Table 2 lists preliminary estimates based on technical and economic factors (such as number of substations, amount of copper required for the contact network, capital expenditures in millions of rubles, etc.) involved in the electrification of a 1,850 km long railroad for the two distribution systems being compared. In calculations dealing with single-phase current, locomotives with electronic rectifiers were assumed.

I.V.I.

Card 3/3

DENISOV, P.K.

105-7-20/29

AUTHOR

DENISOV, P.K., Cand. tech. sc.

TITLE

Problems of Railway Electrification

PERIODICAL

(Voprosy elektrifikatsii zheleznykh dorog. Russian)  
Elektrichestvo, 1957, Nr 7, pp 81 - 82 (U.S.S.R.)

ABSTRACT

One of the most important advantages of a one-phase current with industry-frequency is that of a very limited rise of costs for permanent installations if the turnover and the extent of traffic are considerably greater. Calculations show that in the case of constant cross-section and turnover the capital investments for the electric outfit in the case of an electrification with a.c. and with an increase of the capacity of the electric locomotives used, rised only little. If electrification is carried out with d.c. of 3.000 V this figure for capital investments rises considerably. The optimum speed of the trains is higher in the case of a.c. than with d.c. if all other conditions remain the same. The author gives his viewpoint on the statements of K.G. MARKVARDT in Elektrichestvo, Nr 2, and criticizes them. (With 1 table).  
Institute for Complex Railroad Problems of the Academy of Science of the U.S.S.R. (Institut kompleksnykh problem zheleznodorozhnogo transporta Akademii Nauk SSSR)

ASSOCIATION

PRESENTED BY

SUBMITTED

AVAILABLE

Card 1/1

Library of Congress



*DENISOV, P. K.*

**\*AUTHORS:** Khachaturov, T. S., Voronin, A.V., Denisov P. K. 30-11-10/23

**,TITLE:** **Current Problem in Transportation Development**  
(Aktual'naya problema razvitiya transporta) On the Electrification of Railroads by Means of Monophase Current (Ob elektrifikatsii zheleznykh dorog na odnofaznom toke promyshlennoy chastoty).

**PERIODICAL:** Vestnik AN SSSR, 1957, Vol. 27, Nr 11, pp. 89 - 94 (USSR)

**ABSTRACT:** The author deals with the problem of profitability. In connection with an essentially simplified supply of energy it may be reckoned with a reduction of the costs by 30 - 40%. By the use of alternating current (50 gts) the electric corrosion is also many times reduced; the safety devices necessary in the case of direct-current may also be dropped (see table 1). Besides the own weight of the electrical traction engines (Elok) in connection with the monophase direct current hitherto used can be essentially diminished. Electrical traction engines with monophase direct current (with ion-transformer) permit the use of recuperative braking when the motors work as generators (on lines with a fall) and give off the energy to the electric-supply line. The author among others refers to the investigations (electric traction engines with ion-transformer) carried out in the Rhineland.

Card 1/2

The Development of Transport a Problem of Topical Interest 30-11-10/23  
On the Electrification of Railroads by Means of Monophase Current.

Numberous other problems should also be investigated in prallel with these, the author said, among them the exact technical-economical comparison of the alternating current as traction under the conditions prevailing in the USSR (see table 2). In the directions of the 20th congress of the CPSU a certain aim was set to these intentions. The production in series of main electric traction engines for monophase current began already in 1956. In Leningrad a new institute for electromechanics was established under the direction of M. P. Kostenko, Member of the railroads within the frame work of transport became of principal importance. Besides the change-over to alternating current should at once be carried out, in order to avoid later additional costs. There are 2 tables.

AVAILABLE: Library of Congress

Card 2/2

DENISOV, Pavel Konstantinovich; VORONIN, A.V., otvetstvennyy red.; KLYAUS,  
~~Y.B., Fed.izd-vo; K.LINA, Yu.V., tekhn.red.~~

[Use of alternating current of industrial frequency for electrification  
of railroads in the U.S.S.R.] Primenenie peremennogo toka promyshlen-  
noi chastoty dlia elektrifikatsii zheleznnykh dorog SSSR. Moskva,  
Izd-vo Akad.nauk SSSR, 1958. 76 p. (MIRA 11:6)

(Railroads--Electrification)

(Electric currents, Alternating)

DENISOV, P.K. [deceased]

~~XXXXXXXXXX~~  
Analytic and synthetic function of the cerebral hemispheres in  
chimpanzee. Zhur.vys.nevr. delat. 8 no.6:845-854 N-D '58

(MIRA 12:1)

1. Biological Station at Pavlovo (Koltushi), Pavlov Institute  
of Physiology, USSR, Academy of Sciences.

(LEARNING,

problem solving by chimpanzee (Rus))

VORONIN, A.V.; DENISOV, P.K.

~~Effectiveness of the use of alternating current of commercial~~  
frequency for traction purposes. Vop.elek.zhel.dor. no.1:5-30  
'59. (MIRA 12:8)

(Electric railroads)

DENISOV, P.K.

Determination of optimum conditions for supplying electric power to traction and local consumers of electric power from a power substation in connection with the electrification of a railroad by a.c. with industrial frequency. Elek. zhel dor. no. 2:25-40 '60. (IRA 14:2)

(Electric railroads--Current supply)

(Electric power distribution)

DENISOV, P.K.

Choice of economically expedient power ratings for three-phase  
transformers of a.c. traction substations. Elek. zhel'cor.  
no. 2:41-60 '60. (MIRA 14:2)  
(Electric railroads—Current supply)

DENISOV, P.K.

Magnitude of the minimum permissible rated period in comparison with  
variants. Elek.zhel.dor. no.3:178-186 '61. (MIRA 14:7)  
(Electric railroads--Current supply)  
(Electric railroads--Accounting)



DENISOV, P.K., kand.tekhn.nauk (Moskva)

Technological load limits of the electric transformers of a.c.  
traction substations with complex electric power supply. Elek-  
trichestvo no.11:23-28 N '61. (MIRA 14:11)  
(Electric railroads--Current supply)  
(Electric transformers)

DENISOV, Petr Nikitich; AKHMANOVA, O.S., prof., red.; SATIROVA, S.A., red.

[Principles of language modeling; based on materials of auxiliary languages for machine searching and translation] Printsipy modelirovaniia iazyka; na materiale vspomogatel'nykh iazykov dlia avtomaticheskogo poiska i perevoda. Moskva, Izd-vo Mosk. univ., 1965. 204 p.  
(MIRA 18:7)

DEMISOV, P.P., kand. tekhn. nauk

System of maximum power production in conditions of the "navigation and power" complex. Gidr. stroi. 33 no.2:39-40 F '63.  
(MIRA 16:4)

(Hydroelectric power stations)  
(Inland navigation)

DENISOV, P.P., inzhener.

~~Approximate method of calculating the heating of ship cable~~  
bundles in steady temperature conditions. Sudostroenie 22 no.  
11:25-27 N '56. (MLRA 10:2)

(Electricity on ships)

DENISOV, P. P.

AUTHORS: Ivanovskiy, V. I. and Denisov, P. P.

126-3-28/34

TITLE: Magneto-calorific effect in phase transformations of ferromagnetic alloys. (Magnetokaloricheskiy effekt pri fazovykh prevrashcheniyakh v ferromagnitnykh splavakh).

PERIODICAL: "Fizika Metallov i Metallovedeniye" (Physics of Metals and Metallurgy), 1957, Vol.4, No.3, pp. 550-552 (U.S.S.R.)

ABSTRACT: The results are described of measurements of the temperature dependence of the magneto-calorific effect on the ordering alloy Fe<sub>3</sub>Al (25 at.% Al and the high coercive permnico alloy. For elucidating the possibility of determination of the Curie points of ferromagnetic phases of the alloys with a multiphase structure, the temperature dependence was measured of the magneto-calorific effect. If the alloy contains several phases with differing Curie points the  $\Delta T(T)$  curve will have, in addition to the basic maximum corresponding to the temperature of transition of the alloy into the non-ferromagnetic state, secondary maxima corresponding to the Curie points of the other ferromagnetic phases in the alloy. The tests were made on ball-shaped specimens of 5 mm dia. into which holes of 1 mm dia. were drilled and into these the joint of a copper-constantan thermocouple was fitted which, under conditions of good vacuum, can be used

Card 1/2

126-3-28/34

Magneto-calorific effect in phase transformations of ferromagnetic alloys. (Cont.)

up to 900 C. The temperature dependence of the magneto-calorific effect was investigated on an alloy of the following composition: 12.5% Ni, 64% Al, 3.5% Cu, 23.3% Co, 0.04% C, 0.4% Si, 0.3% Mn, rest Fe. The results for this alloy are plotted in Fig.3, whilst Fig.2 represents similar results for the alloy Fe<sub>2</sub>Al. The described method of investigation of the temperature dependence of the magneto-calorific effect permits determination of the Curie point of the ferromagnetic phases considerably more accurately than is possible from the bend of the  $I_s(T)$  curve.

Card 2/2

There are 3 figures and 7 references, 3 of which are Slavic.

SUBMITTED: April 10, 1956.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov.  
(Moskovskiy Gosudarstvennyy Universitet imeni M.V.Lomonosova).

AVAILABLE: Library of Congress

128-58-6-12/17

*DENISOV, P.P.*

AUTHORS: Rumyantsev, A.M., and Denisov, P.P., Engineers

TITLE: Mechanized Loading of Molds (Mekhanizirovannaya nagruzka form)

PERIODICAL: Liteynoye Proizvodstvo, 1958, Nr 6, pp 28-29 (USSR)

ABSTRACT: Covering molds with weight prior to pouring and removing these weights afterwards, was previously a manual operation at the foundry of the Klimovskiy mashinostroitel'nyy zavod (Klimovskiy Machine Plant), and workers had to manually handle 50 tons of these weights during one shift. The article describes how this work was mechanized on one of the foundry conveyers by adding a suspended overhead conveyer, synchronized with the foundry conveyer, for handling the weights (Fig. 1). The electrical arrangement is described in detail. Now, the workers at the foundry conveyer have only to guide the weights to the top of the molds. There are 2 figures.

AVAILABLE: Library of Congress

Card 1/1 1. Foundries-USSR 2. Foundries-Equipment 3. Castings-Production

24(8)

PHASE I BOOK EXPLOITATION

SOV/1826

Akademiya nauk SSSR. Energeticheskii institut

Teploperedacha i teplovoye modelirovaniye (Heat Transfer and Modeling of Heat Processes) Moscow: Izd-vo AN SSSR, 1959. 419 p. Errata slip inserted. 3,500 copies printed.

Resp. Ed.: N. A. Nikheev, Academician; Ed. of Publishing House: D. A. Ivanova, Tech. Ed.: G. M. Shervenko.

PURPOSE: The book is intended for scientists concerned with heat transfer, heat emission, and hydraulics of liquid metals, etc.

COVERAGE: This collection is dedicated to the theory of Academician N. V. Kipichov who in the twenties initiated a systematic investigation of heat transfer processes and the efficiency of heat apparatus. Later he led the development of research work in this field. Two special conferences devoted to works of Kipichov's school have been published: one in 1938, Materialy soveshchaniya po modelirovaniyu (Materials of the Conference on Modeling) and in 1951, Teoriya podobiya i modelirovaniye (Theory of Similitude and Modeling). The present collection prepared in 1956 represents further development of the work of this school. This theory is fundamental for the analysis of many heat problems in the field of electrical and radio engineering. Of great importance are the first systematic investigations of heat transfer and the hydraulics of liquid metals which as a new kind of heat carrier have been used in the various branches of modern engineering. As a result of special investigations of some cases of convection of heat transfer, a dependence of the process on the kind of liquid, temperature, pressure, direction of the heat flow, and other factors, was discovered and established. On the basis of a wide generalization of experimental data, dependable recommendations for heat analysis of engineering equipment were developed. Of no less interest is the work on heat transmission in boiling liquids and the conduction of vapors. All investigations are based on the theory of similitude, the nature of which, according to N. V. Kipichov, is that of "experimentation." Work on the theory of a regular regime applied to a system of bodies with an internal source of heat is of interest for the future.

Card 2/20

Heat Transfer (Cont.)

SOV/1826

Del'mey, G. M. Theoretical Bases of the Design of Bunched Cables for Ship

This method for adequate bunching of ship cables is given. In this method the following elements are taken into consideration: total thermal regime of the cable depending on various parameters, the degree of influence of the mechanisms of the ship which determines the admissible temperature of heating for each bunched cable, the efficiency of the different cables, and planned bunching would differ for the different cables, and the physical properties of the rubber insulation of the current-carrying wire on which the life of the cable depends. There are 16 Soviet references.

Del'mey, Z. P. Experimental Investigation of Thermal Conditions of Bunched Ship Cables

The author presents experimental verification of some assumptions taken in the analytical calculation of cable bunching including physical and geometrical properties of cables, exterior shape of bunches, substitution of multicore cables with hypothetical cables, and heat conditions of systems in nonstationary temperature fields. There are 8 Soviet references.

Card 4/20



LOS', B.M.; DENISOV, P.P.

Method of load distribution in the daily graph among hydroelectric power stations of local power systems. Probl. reg.rech.stoka no.8:216-256 '59. (MIRA 13:4)  
(Hydroelectric power station)

DENISOV, P.P.

Investigation of the thermal coefficients of bunched cables on  
ships. Zhur.tekh.fiz. 29 no.1:146-150 Ja '59. (MIRA 12:4)  
(Electric cables—Testing)

DENISOV, P. P.

Cand Tech Sci - (diss) "Water-power control of the flow at hydro-electric stations operating in deficit power systems." Moscow, 1961. 11 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev); 180 copies; price not given; (KL, 7-61 sup, 235)

L 09365-67 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/HW  
 ACC NRI AT6023422 SOURCE CODE: UR/0139/66/000/003/0135/0140

AUTHOR: Ivanovskiy, V. I.; Denisov, P. P.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Anisotropy of the magnetocaloric effect in single-crystal cobalt

SOURCE: IVUZ. Fizika, no. 3, 1966, 135-140

TOPIC TAGS: cobalt, magnetic crystal, temperature characteristic, uniaxial crystal, spontaneous magnetization, magnetic anisotropy, angular dependence

ABSTRACT: This is a continuation of earlier work (Izv. vuzov SSSR, Fizika, no. 5, 108, 1960) dealing with the reversible change in temperature corresponding to the reversible rotation of the spontaneous magnetization vectors (magnetocaloric effect) in polycrystalline ferromagnets with cubic lattice, placed in strong magnetic fields. The present study is devoted to a calculation of the magnetocaloric effect in uniaxial single crystals, especially cobalt, as a function of the degree of magnetization and the angle between the magnetic field direction and the hexagonal crystal axis. An expression for the anisotropy of the effect was derived and checked experimentally on spherical samples (6.75 mm diameter). The apparatus and the method of aligning the sample in the easy magnetization direction are described. The measurements consisted of determining the variation of the magnetocaloric effect with the magnetic field intensity at various angles, the angular dependence of the magnetocaloric effect at various magnetic field intensities, the dependence of the magnetocaloric effect on the

Card 1/2

L 09365-67

ACC NR: AP6023422

relative magnetization at various angles, and magnetization curves at various angles. A comparison of the experimental and theoretical data results in plots from which the derivatives of the anisotropy constants with respect to temperature are obtained. The authors thank I. M. Puzey for furnishing the single-crystal cobalt and Professor Ye. I. Kondorskiy for a discussion. Orig. art. has: 7 figures and 10 formulas.

SUB CODE: 20/ SUBM DATE: 23Oct64/ ORIG REF: 003/ OTH REF: 003

DENISOV, Petr Stepanovich, inzh.; DANILOV, L.N., inzh., red.

[Tolerances and fits; a handbook] Dopuski i posadki;  
spravochnik. Izd.2., dop. Moskva, Mashinostroenie, 1965.  
111 p. (MIRA 18:11)

DENISOV, P. S.

"Drought Fighting in TransUral and Siberia" (Bor'ba s Zasukhoy v Zaural'ye i Sibiri), Publishing House of the AS USSR, Moscow, 1954

Translation of Table of Contents and a summary of the context, D 230135, 16 May 55

DENISOV, P S

USER/Cultivated Plants. General Problems

M

Abs Jour: Ref Zhur-Biol, No 5, 1958, 20186

Author : P.S. Denisov

Inst : ~~NOT given.~~

Title : Snow Accumulation by Means of Strips Cultivated with Long-Stalked Plants in the West Siberian Steppes. (Snegonakopleniye pri pomoshchi kulis v stepyakh Zapadnoy Sibiri)

Orig Pub: V sb.: Vopr. ispol'zovaniya snega i bor'ba so snezh. zanosami i lavinami. M., 1956, 27-33.

Abstract: A summary of the Slavgorod Selection Station's work in the use of snow retaining strips cultivated with long-stalked plants (kulisy) is given for ordinary wide-row or cluster sowing of sunflowers, corn, sorghum, Sudan grass and other tall stalk cultures on fallow fields, and on plowed ground from tracts of virgin and long-fallow

Card ; 1/2



USSR/Cultivated Plants. General Problems.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20186.

soils. Fallow plots with three-line and continuous strips had a better and more even distribution of snow than the fallow land with 6-line strips. Data is presented for the increased yield in grain culture and perennial grasses in a number of kolkhozes and sov-khozes of Western Siberia which came as a result of the application of snow retaining strips containing long-stalked plants.

Card : 2/2

~~DENISOV, P.S.~~

Concerning two articles. Zemledelie 4 no.8:107-108 Ag '56.  
(MIRA 10:1)

1. Slavgorodskaya gosselektantsiya.  
(Volga Valley--Agriculture) (Siberia--Wheat)

J

Country : USSR  
Category: Soil Science Mineral Fertilizers.  
Abs Jour: RZhBiol., No 14, 1958, No 63069  
Author : Denisov, P.S.  
Inst : -  
Title : The Effectiveness of Organic and Mineral Fertilizers  
in Relation to the Moisture Conditions in the  
Kulundinskiy Steppe.  
Orig Pub: Pochvovedeniye, 1956, No 9, 63-70  
Abstract: Experiments of the Slavgorodskaya Selection Sta-  
tion on the application of organic and mineral  
fertilizers to chestnut soils in June under re-  
plowed fallow and in spring before sowing showed  
the great effectiveness of nitrogen fertilizers.  
Card : 1/4

Country : USSR  
Category: Soil Science. Mineral Fertilizers

J

Abs Jour: RZhBiol., No 14, 1958, No 63069

In the dry year of 1953 the precipitation was 289 mm and the soil moisture during the vegetative period about 9%; in 1954 the moisture reached 14%. The application of fertilizers under spring wheat in 1953 secured harvest increases only for compost and nitrogen. In 1954 the highest crop increase (4 centners/hectare) for wheat was obtained using manure and local granulated fertilizer. The crop increase due to fertilizer was from 1.9-4.5, and due to compost (5 tons/hectare), 10.2 centners/hectare. The spring application of nitrogen fertilizers also provided a high harvest increase of new wheat (4.6-5.5 centners/hectare). The application of nitrogen fertilizers to a layer

Card : 2/4

J-32

Country : USSR  
Category: Soil Science. Mineral Fertilizers.

J

Abs Jour: RZhBiol., No 14, 1958, No 63069

of grasses guaranteed an addition to the crop of spring wheat of about 3 centners/hectare; later on, the harvest addition amounted to 4 centners on the nitrogen background, to 2.7 centners on the nitrogen-phosphorus background and to 1.6 centners on the phosphorus background. The high wheat yield after application of nitrogen fertilizers is explained by the small reserves of nitrates in chestnut soils (2-3 mg/kg of soil) at the time when the free phosphorus content is 350-600 kg/hectare. Without snow retention and accumulation of moisture, the application of fertilizers, especially of phosphorous fertilizers,

Card : 3/4

J

Country : USSR  
Category: Soil Science. Mineral Fertilizers

Abs Jour: RZhBiol., No 14, 1958, No 63069

does not justify the expense in dry years. --  
S.A. Nikitin

Card : 4/4

J-33

DENISOV, P.S., kandidat sel'skokhozyaystvennykh nauk.

Readers' conference of agronomists at the Siberian Scientific  
Institute of Agricultural Research. Zemledelie 5 no.7:93-94 J1  
'57. (MLBA 10:8)

(Agriculture--Periodicals)

USSR/Soil Science. Tillage. Melioration. Erosion:

J-5

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43880

Author : Denisov P.S.

\*Inst : ~~Not Given~~

Title : Tilling the Fellows in the Siberian Steppes

Orig Pub : Zemledeliye, 1957, No 6, 25-28

Abstract : Field tests made in 1953-1956 at the Slavgorodskaya Selection Experimental Station in the zone of chestnut sandy-loam soils and the southern chernozems of the Kulundinskaya steppe to study various methods of working the stubble crop fellows, have shown that deep non-terracing loosening of the soil to 50 cm. in a fellow (in June and August) produces heavy losses of soil moisture and reduces the yield. Less drying out of the soil takes place by working the fellow land with a non-terrace or terracing plow to a depth not greater than 20-30 cm.--F.N. Sofiyev

\* *Sibirskiy Nauchno-Issledovatel'skiy Institut Sel'skogo Khozyaystva.*

Cord : 1/1



DENISOV, P.S., kand.sel'skokhoz.nauk

Role of shelterbelts in the Kulunda Steppe. Zemledelie 6 no.8:20-22  
Ag '58. (MIRA 12:11)  
(Kulunda Steppe--Windbreaks, shelterbelts, etc.)

DENISOV, P.S., kand.sel'skokhozyaystvennykh nauk

Role of snow in increasing the moisture of virgin and waste lands.  
Zemledelie 23 no.1:12-17 Ja '60. (MIRA 13:12)

1. Sibirskiy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy institut sel'skogo khozyaystva.  
(Soil moisture) (Snow)

DENISOV, Pavel Stepanovich, kand. sel'khoz. nauk; MAMONOV, Nikolay  
Nikolayevich, kand. sel'khoz. nauk; YUFEROV, Vasiliiy  
Alekseyevich, kand. sel'khoz. nauk; BORODKINA, L.A., red.;  
LEVINA, L.G., tekhn. red.

[What are the advantages of green fallowing] Chto daiut za-  
niatye pary. Moskva, Rossel'khozizdat, 1963. 69 p.  
(MIRA 17:3)

DENISOV, P.S., kand.sel'skokhoz. nauk

Using the seed drill plow in the steppes of Siberia. Zemledelie  
25 no.4:76 Ap '63. (MIRA 16:5)

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo  
khozyaystva. (Kulunda Steppe--Wheat) (Sowing)

KATSEV, P.G.; YEPIFANOV, N.P.; ~~DENISOV~~, P.S., inzh., retsenzent;  
MALEVSKIY, N.P., inzh., red.; GARANKINA, S.P., red.izd-va;  
TIKHANOV, A.Ya., tekhn. red.

[Manual for broaching-machine operators] Spravochnik pro-  
tiazhnika. Moskva, Mashgiz, 1963. 254 p. (MIRA 16:7)  
(Broaching machines)

DENISOV, Petr Stepanovich, inzh.; YEVSTRAT'YEV, A.I., inzh., red.  
izd-va; SOKOLOVA, T.F., tekhn. red.

[Tolerances and fits; manual] Dopuski i posadki; spravochnik.  
Moskva, Mashgiz, 1962. 78 p. (MIRA 15:6)  
(Tolerance (Engineering))—Standards)

PHASE I BOOK EXPLOITATION

SOV/3706

Shatin, V.P., Engineer, V. V. Kuz'min, Engineer, and P.S. Denisov, Engineer

Konstruktivnyye elementy i normalizovannyye uzly krepleniya rezhushchikh instrumentov; spravochnik (Parts and Standard Subassemblies for Mounting Cutting Tools; Handbook) Moscow, Mashgiz, 1959. 263 p. Errata slip inserted. 15,000 copies printed.

Reviewer: Yu. L. Frumin, Engineer; Ed.: V.I. Rybakova, Engineer; Tech. Ed.: B.I. Model'; Managing Ed. for Information Literature: I. M. Monastyrskiy, Engineer.

PURPOSE: This book is intended for tool designers and process engineers in machine-building plants.

COVERAGE: The book deals with the standard tool holding devices for metal cutting used in Soviet industry. Brief descriptions are given of chucks, collets, and other holding devices for shank-type tools. Means of mounting milling cutters, boring bars, and broaches to drive elements are explained and illustrated. Carbide tipping of cutting tools is also described. No personalities are mentioned. There are 5 references: 4 Soviet, and 1 English.

TABLE OF CONTENTS:

Ch. I. Elements and Subassemblies of Cutting Tools for Drilling and Boring Machines 3

Card 1/7

DENISOV, P. T., TRUBNIKOV, P. T.

Building Machinery

Electric rammer D-253 Mekh. stroi/No. 3, 1952  
9

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.



DENISOV, P. V.

Kurort Issyk-Ata (Health Resort, issyk-ata) Arashan. Frunze, Izd-vo Kirgan SSSR, 1950.  
36 p. Illus., Tables (Kurprtnyye Resursy Kirgizskoy SSR. Vyp. i)

At head of title: Akademiya Nauk SSSR. Kirgizskiy Filial.

SO: 212N/5  
857.14  
.D3

1. DENISOV, P. V.
2. USSR (600)
4. Grain
7. (Best varieties of cereal crops) Luchshie sorta zernovykh kul'tur.  
Moskva, Gos. izd-vo. sel'khoz. lit-ry 1952. '51

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

DENISOV, P. V.

"An Investigation of the Phenomenon of Adhesion on Plane Steel Surfaces."  
Cand Tech Sci, Moscow Machine Tool and Tool Inst imeni I. V. Stalin, 19 Jan 55.  
(VM, 10 Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

ZHDANOV, G.T.; DENISOV, P.V.; LU CHAO-TSZYAN [Lu Ch'ao-chiang]

Exchange of experience. Zav.lab. 28 no.3:380 '62. (KIRA 15:4)

1. Vsesoyuznyy alyuminiyovo-magniyevyy institut (for Zhdanov).
2. Moskovskiy stankostroitel'nyy institut (for Denisov, Lu Chao-TSyang).

(Proportioning equipment)

DENISOV, Petr Vasil'yevich; MAL'CHIKOVA, V.K., red.; PRESNOVA,  
V.A., tekhn. red.

[Seeding rates for grain crops and peas] Normy vyseva  
zernovykh kul'tur i gorokha. Leningrad, Lenizdat, 1963.  
53 p. (MIRA 16:10)  
(Grain) (Peas) (Sowing)

DENISOV. P.V., inzhener.

Driving reinforced concrete piles by the wash method using  
compressed air. Gidr. stroi. 25 no.7:26-28 Ag '56. (MLRA 9:10)

(Pile driving)

DENISOV, P. V.

✓ Determination of total alkalinity [in water]. P. V. Denisov. *Trudy Inst. Khim. Kirgiz. Filiala Akad. Nauk S.S.S.R.* 1953, No. 5, 73-7; *Referat. Zhur., Khim.* 1955, No. 635. —To increase the sharpness of color transition in titration, the indicator methyl red is added to the alk. soln. free of  $\text{HCO}_3^-$  in such vol. that the amt. of alkali needed to neutralize 100 ml. acidified  $\text{H}_2\text{O}$  would contain 3-4 drops of the indicator. In titrating with 0.02-0.01 N alkali in artificial or weak light and by removing from the analyzed soln.  $\text{CO}_2$  and  $\text{H}_2\text{S}$  formed from the decompn. of carbonates and sulfites a complete reproducibility of results was obtained. Thus, the possibility of detn. of total alky. of weakly mineralized waters in a stationary lab. was ascertained. Water samples taken with a hose siphon from thermal springs and stored in stoppered bottles did not change their alky. in up to 20 days. M. Hosh

DENISOV, P.V.

Solubility of sodium metasilicate in sodium carbonate solutions. P. V. Denisov and S. V. Bleslinski. *Trudy Inst. Khim. Akad. Nauk S.S.S.R.* 1953, No. 5, 79-83; *Referat. Zhur., Khim.* 1955, No. 1818. — The soly. of Na metasilicate was studied in 1-20%  $\text{Na}_2\text{CO}_3$  solns. at 20°. The purpose was to elucidate the production and treatment of Na metasilicate and to explain the formation and salt compn. of natural siliceous water. This study was made in paraffin-coated Jena glass flasks at pH 13.51. The concn. of Na metasilicate in  $\text{Na}_2\text{CO}_3$  solns. decreased as the concn. of the latter increased. This is attributed to the absence of interaction between the salts and to the presence of a common ion. The method of calcg. equil. concns. of silicates and carbonates in their mixts. from total alky. is explained.

M. Hest

chem

2

5

PM



DEWISOV, P. V.

✓ Solubility of sodium metasilicate in sodium bicarbonate and chloride solutions. P. V. Dewisov and O. I. Belova. *Trudy Inst. Khim., Kirgizskaya Akad. Nauk S.S.S.R.* 1953, No. 5, 83-8; *Referat. Zhur., Khim.* 1955, No. 1819. The purpose was to check the previous results (cf. preceding abstr.). The soly. of Na metasilicate in 0-20% NaCl and 0-7.5% NaHCO<sub>3</sub> was detd. at 20°. The soly. of Na metasilicate decreased with increasing concn. of NaCl, as in the case of Na<sub>2</sub>CO<sub>3</sub>, whereas the soly. of Na metasilicate increased with an increase in the concn. of NaHCO<sub>3</sub>. In the latter case there was a decrease in the pH which is attributed to the interaction between the bicarbonate and silicate ion according to:  $\text{SiO}_3^{--} + \text{HCO}_3^- \rightleftharpoons \text{HSiO}_3^- + \text{CO}_3^{--}$ ,  $\text{HSiO}_3^- + \text{HCO}_3^- \rightleftharpoons \text{H}_2\text{SiO}_3 + \text{CO}_3^{--}$ , and  $\text{H}_2\text{SiO}_3 \rightleftharpoons \text{nSiO}_2 \cdot \text{mH}_2\text{O}$ .

M. Hosh

chem

2

6

PM

660  
1  
✓ Schematic explanation of the origin of the thermal springs  
Tyan-Shan. P. V. Denisov (Chem. Inst. Sibirsk. Akad. Sci. U.S.S.R., F.R.G.). *Gidrokhim. Materiy* 23, 607-650. The formation may proceed in 5 stages. The

1. In the first stage, the water reacts with the rocks, forming  $\text{Mg}$ ,  $\text{SO}_4$ ,  $\text{Cl}$ ,  $\text{HCO}_3$ , and  $\text{SiO}_2$  etc. At the 2nd stage the water reacts with the lakes, and other surface basins, leading to an increase of bicarbonates and sulfates of earth alkalies. In the 3rd stage the surface waters later come into contact with the rocks, basins where the bicarbonates and sulfates of earth alkalies increase without reaching the saturation point. At the 4th stage, prolonged circulation at considerable pressure raises the temp. and the pH to 9-10. Higher temp. and increased pressure accelerate the erosion of heavy metal ions. Sulfides increase, causing the pptn. of heavy metal ions, and  $\text{Mg}$  are pptd. as silicates, causing a relative increase of  $\text{Na}$ . At the 5th stage the underground waters rise up wards, break through quaternary rocks, and undergo a change of ionization and a drop in temp.  $\text{NO}_2$ ,  $\text{NO}_3$ , and  $\text{NH}_4$  are absent because these ions require the action of aerobic bacteria which are not present in deep underground waters.

A. S. Mirkin

Deni 300. PV

Role of calcium silicate in the formation of salts in the thermal waters of North Tyan-Shan. P. V. Dintsov (Kipchik Branch Acad. Sci. U.S.S.R., Frunze). *Geokhimiya* 24, 95-6 (1981).—Hydrochem. investigations of waters of North Tyan-Shan make possible a general explanation of the formation of low mineralized waters. The low mineralized cold waters are characterized by a low content of  $\text{SiO}_2$  and by  $\text{Ca}^{++} > \text{Mg}^{++} > \text{Na}^+$ . Transformation of cold waters into thermal waters is accompanied by an increase of content of  $\text{SiO}_2$  and change of the correlation between cations to  $\text{Na}^+ > \text{Ca}^{++} > \text{Mg}^{++}$ . This can be explained by the exchange reaction between rocks and ionic constituents of waters,  $\text{Ca}^{++} + \text{Na}^+(\text{T}) \rightleftharpoons 2\text{Na}^+ + \text{Ca}(\text{T})$ , and by reciprocal reaction of Ca and Mg ions with silicates, forming difficultly sol. Ca and Mg silicates. The solubility of  $\text{CaSiO}_3$  showed that in the formation of thermal waters, the second-type reaction is absent. N. Chumachenko.

1. Kirgizskiy filial Akademii nauk SSSR  
 9. Frunze. (water, underground) (water analysis)

Denisov, P. V.

Chemical composition of snow in the Kharkov region.  
P. V. Denisov and A. L. Bugalov (Zootech. Inst., Kharkov).  
Dokl. Akad. Nauk Ukr. R.S.S.R. 1956, No. 1, 75-8 (Russian summary).—Samples of snow in the Kharkov region taken during 1954-1955 were analyzed. The mineral content varied between 13.14 and 60.17 mg./l. and the pH from 0.34 to 0.42. The content of the different ions was in the order:  $\text{SO}_4^{2-} > \text{HCO}_3^- > \text{Cl}^-$  and  $\text{Ca}^{++} > \text{Mg}^{++} > \text{Na}^+$ ;  $\text{NH}_4\text{OH}$  up to 0.89 mg./l. and nitrates up to 1.12 mg./l. Traces of other elements were found. The mineral content increased with the temp. and the velocity of the winds.  
I. Benbowitz

2

*DENISOV, P. V.*

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26591.

Author : Denisov, P.V.; Bugayov, A.L.  
Inst : Academy of Sciences of Ukrainian SSR.  
Title : Dynamics of Changes of Salt Contents in  
Water of the Lozoven'ka River

Orig Pub : Dopovidi AN URSR, 1956, No. 2, 144 - 146.

Abstract : It was established that notwithstanding the short length of the river, the total mineralization of the water and the relation among the main ingredients change within considerable limits. The dry residue is from 472.4 to 1136.8 mg per lit.

Card 1/1

DEMISOV, P.V.; DRUZHININ, I.G.; BELOVA, O.I.; KADYROV, V.

Hydrochemical characteristics of rivers in the Chu Basin. Trudy  
Inst.vod.khoz.i energ.AN Kir.SSSR no.3:123-126 '56. (MLRA 9:11)  
(Chu Valley--Rivers) (Water--Analysis)

DENISOV, P.V.; BELOVA, O.I.; KADYROV, V.; DRUZHININ, I.G.

Hydrochemical characteristics of rivers of the Issyk-Kul' Basin.  
Trudy Inst.vod.khoz.i energ.AN Kir.SSR no.3:127-137 '56. (MLRA 9:11)  
(Issyk-Kul' Province--Rivers) (Water--Analysis)

*DENISOV, P. V.*

Category: USSR /Physical Chemistry  
Thermodynamics. Thermochemistry. Equilibrium. Physico-  
chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29968

Author : Denisov P. V., Belova O. I.  
Inst : Institute of Chemistry. Academy of Sciences Kirgiz SSR  
Title : Solubilities In the System  $MgCO_3$ - $KHCO_3$ - $C_{12}H_{22}O_{11}$  .

Orig Pub: Tr. In-ta khimii AN KirgSSR, 1956, No 7, 65-68.

Abstract: As a continuation of previous work by the authors (RZhKhim, 1956, 24220) a study was made of the effect of addition of  $KHCO_3$  (I) on solubility of  $MgCO_3$  (II) in 10% solution of saccharose, at  $20^\circ$ , and of kinetics of decomposition of  $Mg(HCO_3)_2$  (III) on boiling with a solution of saccharose of the same concentration. It is shown that on increase of concentration of I from 0 to 2% the solubility of II increases considerably (from 0.45 to 2.27 mg-equivalent MgO in 100 ml. solution), changing but little on further increase of I content of the solution. It was ascertained that decomposition of III takes

Card : 1/2

-87-



Category: USSR / Physical Chemistry  
Thermodynamics. Thermochemistry. Equilibrium. Physico-  
chemical analysis. Phase transitions.

B-8

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29968

place practically within the first few minutes of boiling. Further boiling causes, concurrently with a decrease in concentration of III, a lowering of the II content formed during the beginning of boiling. In solutions which were subjected to prolonged boiling (up to 3 hours) total alkalinity amounts to only 0.1 mg-equivalent MgO per 100 ml solution, and is due essentially to carbonate alkalinity (0.09 mg-equivalent).

Card : 2/2

-88-

DENISOV, P.V.; BELOVA, O.I.

Method for determining chlorides in sugar solutions. Trudy Inst.  
khim. AN Kir.SSR no.7:69-77 '56. (MIRA 10:3)  
(Chlorides--Analysis) (Sugar--Analysis and testing)

15-57-10-14664

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 216 (USSR)

AUTHORS: Denisov, P. V., Bugayev, A. L.

TITLE: Ground Water Salt Content in the Northwestern Environs  
of Khar'kov (O solevom sostave podzemnykh vod severo-  
zapadnykh okrestnostey g. Khar'kova)

PERIODICAL: Sb. tr. Khar'kovsk. zootekhn. in-t, 1956, Vol 8, pp 179-  
188

ABSTRACT: Four tables are given of the analyses of 29 samples  
from the Lozoven'ka reservoir and adjacent populated  
centers. Total water mineralization ranges from 441.9  
to 2047.8 milligrams per liter. Highest water minerali-  
zation is found in wells and springs on the left bank  
of the Lozoven'yek river, where it exceeds 1 000 milli-  
grams per liter, while water mineralization in the  
majority of wells and springs is 600 to 1 000 milligrams  
per liter. Among cations the following are the main

Card 1/3

15-57-10-14664

Ground Water Salt Content in the Northwestern (Cont.)

minerals: Ca 67.2 to 365.7 milligrams per liter and Mg 6.0 to 114.3 milligrams per liter--these concentrations increase in the waters of the Lozovaya Cherkasskaya village to 23.2 milligrams per liter in waters on the right bank of the Lozoven'yek river and 34.3 to 186.2 milligrams per liter on the left bank. Among anions the following are the main minerals: bicarbonates 225 to 469 milligrams per liter in waters of the right bank, and 19.3 to 54.8 in waters on the left bank, sulfates 26.2 to 741.6 milligrams per liter, chlorides 9.2 to 254.5 milligrams per liter--their content diminishes in the waters of the upper course of the Lozoven'yek river--nitrates up to 70 milligrams per liter and in densely populated areas up to 400 milligrams per liter--the amount of nitrites is quite insignificant--ammonia is approx. 0.87 milligrams per liter, only traces of phosphates are found, Fe is present in oxidized form up to 1 milligram per liter,  $\text{SiO}_2$  amounts to approximately 40 milligrams per liter in the central area but increases up to 13.2 to 15.3 milligrams per liter in the waters of the lower part of the Lozoven'yek river. Oxide content of the waters is

Card 2/3